



**OFFICE OF THE GOVERNOR  
NEVADA STATE OFFICE OF ENERGY**

**Nevada State Office of Energy Business Summary**

**Introduction**

Much has changed in the Nevada State Office of Energy (NSOE) in the past year. The NSOE has doubled in size and is leading several new key energy-related initiatives in Nevada. The current priority is ensuring the 2009 American Recovery and Reinvestment Act (ARRA) programs are implemented to support job creation, reduction of carbon emissions, and promotion of renewable and energy efficiency projects. The U.S. Department of Energy has sent letters complimenting the NSOE for distinguishing itself as one of the leading states in ARRA implementation. In addition to ensuring the ARRA dollars are put to work quickly, the NSOE has created the Nevada Energy Economy Strike Force, strategically partnered with economic development entities, proposed a federal land grant to the state's congressional delegation, initiated a distributive generation study, launched the Nevada Retrofit Initiative and Multi-Agency RFP Programs, and is working to improve state legislation related to energy efficiency and boosting the state's renewable energy applications.

**Mission**

The mission of the NSOE is to ensure the wise development of the state's energy resources in harmony with local community economic needs and Nevada's natural resources by leading the nation in renewable energy production, energy efficiency and conservation, and exportation. The NSOE strives for this by facilitating cooperation between key stakeholders, leading initiatives to stimulate economic development and attracting every energy-related business venue including energy education, retrofitting, manufacturing, site development, generation and production, interstate and intrastate transmission, materials transportation, and energy-related recycling.

**Staff**

The NSOE is a small, but effective team with a proven track record of initiating and driving cutting edge energy programs to stimulate Nevada's energy economy. The NSOE is staffed by Director Stacey Crowley, Deputy Director Stephanie Brooks, State Energy Program Manager Pete Konesky, Economic Development Programs Manager Robert Nellis, Energy Grant Programs Manager Tom Wilczek, LEED Tax Abatement Program Management Analyst Lorayn Walser, Grant Monitoring Analyst Kevin Johnson, Renewable Energy Analyst Tara Vogel, Outreach Coordinator Sean Sever, Grants & Projects Analyst Jacqueline Cashmere, Accountant Technician Dawn Nenzel, Energy Assurance Intern James Pitcher, NRI Project Manager Gary Little, and Administrative Assistant Ana Broderson. Under the leadership of Director Crowley, the NSOE has become a model example for how government can operate effectively with a lean, but capable staff that is able to give the state a return on its investment well in excess of the small amount of general fund dollars utilized by the agency. The majority of the NSOE's funding is from federal grants and interest earned on loans granted, making it as close to a self-sustaining private sector entity as can be hoped for within state government.

**Fuel/Biomass**

Fuel is one of the critical energy issues in Nevada. In fact, fuel disruptions are why the NSOE was created. To address this critical issue, the NSOE has created an energy emergency plan with a fuel rationing section to address fuel issues if there is a shortage. Monthly webinars are conducted with the California Energy Commission and other states to address fuel use, supply, markets and peripheral fuel related issues. In addition, the NSOE reports state fleet compliance with the Energy Policy Act that requires 75 percent of the new vehicle purchase to be alternative fueled vehicles. The NSOE also supports two regional Clean Cities Coalitions (one in the North and one in the South that are supported by the DOE) that promote the reduced use of fossil fuels and greater use of alternative fuels. Since Nevada does not produce its own fuel and its citizens would prefer domestically supplied fuels, the NSOE has been allied with the U.S. Department of Agriculture and Environmental Protection Agency to promote bio-fuels that could be produced in Nevada. The use of biomass to create fuel or electricity that would support the Nevada agricultural industry is considered a viable economic driver for the state.

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### **Distributed Generation (DG)**

The NSOE believes a substantial increase in DG, along with the exportation of renewable energy to other states and the solicitation of renewable energy manufacturers and generators will create a substantial impact on the energy economy in Nevada and help solve some of the state's budgetary and employment woes. The beauty of DG, a concept that permits the electricity consumer who is generating electricity for their own needs and sending surplus power back to the power grid, is that no transmission or distribution of energy is required. The NSOE initiated an effort to study how much DG Nevada can take on before it starts affecting electricity rates. The NSOE is now participating in a Public Utilities Commission of Nevada investigation of the impact of DG on NV Energy's distribution systems (docket #10-04008).

### **Renewable Energy RFP**

Building upon the success with the Nevada Army National Guard Super Solar Project, Phase I, Robert Nellis initiated the Statewide Renewable Energy RFP to stimulate economic development of renewable energy projects on public properties. The National Guard Super Solar project involved three sites that constructed solar shaded parking structures within a year to produce power at a fixed rate over a 20-year period. The NSOE used a similar model to launch its Statewide Renewable Energy RFP that was composed of 10 state agencies, including the Nevada System of Higher Education and the City of Las Vegas. A total of 55 sites were included in the RFP attracting vendors from all over the nation. Eight proposals were received and a contract is now in the process of being awarded upon approval by the Nevada Board of Examiners. Once approved, the awarded vendor will be able to organize the construction of multiple sites at once, reducing construction costs for a net savings that will be passed on to the agencies receiving the power produced by the systems. It is estimated this RFP will drive over \$250 million worth of private sector capital into Nevada's economy; employ over 300 Nevadans over the term of the contract; and result in over \$30 million in Nevada tax and fee based revenues. This is in addition to the long-term energy savings benefits that directly help reduce the general fund expenditures on power costs.

### **Stimulus Programs**

The NSOE received four awards under the provisions of the ARRA which included \$34.7 million in energy stimulus funds to accelerate energy efficiency and renewable energy projects in Nevada. The NSOE was also awarded with a \$9.6 million Energy Efficiency & Conservation Block Grant (EECBG) and a \$192,000 State Energy Program Formula Grant with a \$38,400 match. These are basically contracts with the federal government with required deliverables and once agreed to, do not allow much flexibility. Summaries of the major programs and their current status follow. Read the Milestone Minder at [www.energy.state.nv.us/](http://www.energy.state.nv.us/) for more information.

- **State Buildings** - \$7.9 million for energy efficiency & renewable energy upgrades at state-owned buildings, 124 lighting retrofits as well as solar installations, some complete, others in process
- **Schools** - \$10.5 million for energy efficiency & renewable energy upgrades for 16 school districts, mainly solar installations, some complete, others in process
- **Engineering Feasibility** - \$3.7 million for feasibility studies to help accelerate energy projects in Nevada, contract with Nevada Energy Assistance Corporation, planning commenced
- **Appliance Rebates** - \$2.5 million that allowed Nevadans to receive rebates when purchasing Energy Star appliances, 12,000 old appliances replaced, all money allocated
- **Street Lights & Traffic Signals** - \$1.7 million to replace existing lighting with energy efficient LED lights, many projects complete, others in process
- **Energy Related Codes** - \$1.35 million to secure adoption of more energy efficient 2009 International Building Codes in Nevada cities & counties, workshop & hearings next
- **Energy Assurance** - \$438,573 to implement plan for monitoring energy supply & demand in Nevada, Energy Supply Disruption Tracking Plan approved, contingency center being configured
- **Alternative Fuels** - \$170,000 to replace a fuel tank at the Nevada State Motor Pool in Las Vegas with a dual capacity ethanol tank, project complete
- **EECBG** - \$9.6 million for energy efficiency projects in Nevada cities & counties, emergency vehicle idle reduction devices, energy monitoring for state buildings, and traffic signals & street lights, 96% of funds expended, 100% soon

### **Revolving Loans**

The purpose of the Revolving Loan Program is to provide low interest loans to applicants for the construction of new renewable energy systems or the expansion of existing renewable energy systems within Nevada. The program fills a market niche in a very tight lending market enabling applicants to develop renewable energy systems in Nevada that would otherwise not be built. The development of these systems is a key component to building a new energy economy sector within Nevada, providing jobs in the severely depressed construction economy and opening the door of opportunity to bring manufacturing jobs to Nevada. The NSOE's role in infusing capital toward the development of renewable energy resources leads to an increase in state revenues. To ensure future growth and ongoing success of the program, a "suite" of loan programs will be developed and funded. For instance, the residential market is the largest market for energy efficiency and loan programs are in the process of being developed to meet the needs of this market. Additionally, private capital will be leveraged to expand the program's reach as funds "revolve" back in to the program. Developing new programs and negotiating agreements with major financial institutions will be a high priority of the NSOE in 2011 to meet this growing market need.

### **Nevada Retrofit Initiative**

The NSOE received a \$5 million grant for the NRI which will strengthen Nevada's residential building retrofit market with the goal of implementing Home Performance with Energy Star (HPwES) and ultimately retrofit at least five percent of all single family residences in Nevada by 2021. The NRI will focus on the major metropolitan areas of Clark and Washoe counties; however, transferability will be available to other parts of the state. The NRI will enable Nevada to demonstrate innovative and impactful project models that are highly transferable, both statewide and nationally. Assembled participants include Nevada's two largest counties and their respective cities, Home Free Nevada, Nevada State Bank, Wells Fargo Bank, the Nevada System of Higher Education, NV Energy, Southwest Gas, the Public Utilities Commission, the Nevada Energy Economy Strike Force, and the NSOE. The NRI is built on a foundation of a public-private partnership that will make home retrofits an attractive option for many Nevadans and will result in a profound economic and market transformation for the state. Innovations of this project are projected to generate more than 2,000,000 MMBtu in annual energy savings by 2021, create/preserve more than 2,400 jobs, and contribute an economic impact of more than \$220,000,000.

### **Energy Technology & Manufacturing**

The NSOE has successfully utilized the Revolving Loan Program as a marketing tool to attract potential energy manufacturers to Nevada. One company is utilizing loan funds to install three bio-digesters on dairy farms throughout northern Nevada. This California-based company is now looking to locate a bio-digester manufacturing plant in Nevada that could bring 150-200 manufacturing jobs. Another company located in New Mexico has been interested in moving to Nevada for some time, but needed capital to assist in relocation. While Nevada is currently unable, unlike many other states, to offer land or cash to companies desiring to relocate to our State, the NSOE has been able to leverage its resources through the Revolving Loan Program as an incentive to attract this company to Nevada. As a result of being awarded revolving loan funds for a demonstration project, they now intend to locate a heat recapturing manufacturing plant that may employ as many as 200 Nevadans. Nevada's ability to attract manufacturers can be a key tipping point in creating the inertia Nevada needs to see more energy technology development and manufacturing businesses relocating here.

### **Strike Force**

The NSOE, in partnership with the Nevada Commission on Economic Development, launched the "Nevada Energy Economy Strike Force" in April 2010. The Strike Force includes 36 professionals with backgrounds in law, energy transmission, land development, renewable energy, utilities, public administration, energy efficiency, public works, education, environmental regulation and permitting, military, and political leadership. It is organized into four teams (Regulatory Innovation, Energy Efficiency, Land Development and Energy Transmission) that meet on a weekly basis to promote rapid deployment of energy development in Nevada. The purpose of the Strike Force is to break down existing barriers to allow rapid deployment of renewable energy development, energy efficiency measures, exporting power, and business location with the single overarching purpose of developing a thriving and sustainable energy economy in Nevada.

### **Legislative Initiatives**

The Nevada Energy Economy Strike Force will recommend the following in the upcoming legislative session to advance the development of renewable energy development in Nevada:

- Energy efficiency removed from the RPS with respective stand alone mandates
- Increase current net meter, per meter caps in NRS 704.773 from 1MW to 5MW
- Increase the state overall nameplate percentage of DG allowed in NRS 704.773 from 1% to 2.4%
- Remove the 2.4 solar REC multiplier down to 1:1 fossil parity by deleting NRS 704.7822
- Discuss RenewableGenerations rebate funding vehicles to increase the total amount of funds allocated to the program
- Continue Wind and Water Demonstration Programs and create a new water category for government/urban applications

The NSOE is already being counted on by the Legislative Counsel Bureau to provide expert analysis to legislators on energy-related issues and education to new legislative members.

### **Energy Transmission**

Nevada has successfully adopted the policies necessary to encourage the development of renewable energy resources. The next critical step in this process is transmission. Without access to transmission, developers cannot get their energy to markets within Nevada or to markets in our neighboring states. Energy export to California is a key component to enabling Nevada to create a viable energy economy. The transmission team is composed of 10 industry experts who are actively working on initiatives to work with California utilities and the California Energy Commissions, Renewable Energy Transmission Initiative (RETI) to improve Nevada's energy export potential.

### **Renewable Development**

Nevada has been dubbed by the media as the "Saudi Arabia of Solar." Nevada is indeed rich with both abundant solar as well as land resources. However, the ability to harness and utilize those resources to expeditiously export power is hampered by the fact that Nevada is 85 percent federally owned and managed. The large amount of federal ownership makes it difficult for even privately owned lands to be developed for renewable energy production since many sites must be accessed through federal lands. The impediments to developing federal lands and accessing private lands must be removed to enable Nevada to live up to the expectation of becoming the "Saudi Arabia of Solar." The NSOE has initiated a five million acre land grant proposal to Nevada from the federal government to address this inequity with its competitor states. The proposal is based on correcting a long-standing oversight with how Nevada was granted its original state lands at the time of statehood.